



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,181	03/05/2002	Subodh A. Samuel	14012-084001/82-04-009	7558
26230	7590	11/16/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			TRUONG, LAN DAI T	
			ART UNIT	PAPER NUMBER
			2143	
DATE MAILED: 11/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/092,181	Applicant(s) SAMUEL ET AL.	
	Examiner lan dai thi truong	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/11/05; 08/26/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

// double check claim 7, 15

Claim rejections-35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1) Claims 1, 11, 2-3, 8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al. (U.S. 6,907,011), “Miller”, herein after.

Regarding to claims 1, 11 which is exemplary of claims 2-3, 8, 10:

Miller discloses the invention substantially as claimed, including a method and system which can be implemented in computer hardware or software code for distributing software, comprising:

Distributing a message from an application server to one or more application layer routers: (Miller discloses a publish-subscriber system distributes a message to end user by passing message through plurality routers before reaching desired destination: Figures 1 and Figure 2; column 4, lines 21-67)

Distributing the message to an endpoint using a publish and subscribe architecture to one or more second channels selected from a second channel layer: (Figures 1 and Figure 2)

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7, 9, 12 and 15-16 are rejected under 35 U.S.C 103(a) as being unpatentable over Miller in view of Kaval (U.S. 6,687,731)

Regarding to claim 5:

Miller discloses the invention substantially as disclosed in claim 1, but does not explicitly teach wherein the first channel and the second channel are selected by the application server based on the available data processing capacity of the selected application layer router.

However, Kaval discloses a method of arrangement for load sharing in computer networks and arrangement for distribution of traffic, see (Kaval: abstract, lines 1-5). Kaval discloses the routing information includes details about the available processor capacity, see (Kaval: column 3, lines 49-55).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Kaval's ideas of routing information includes details about the available capacity of each link with Miller's systems in order to get the benefit from the lower delay and higher performance, see (Kaval: column 2, lines 7-10).

Regarding to claims 6 and 15-16:

Miller discloses the invention substantially as disclosed in claims 1 and 11, but does not explicitly teach wherein distributing the message to the endpoint further comprises: storing the message at the selected application layer router; and distributing the message to the endpoint using the publish and subscribe architecture to one or more second channels selected from the second channel layer after the occurrence of a predetermined event

However, Kaval discloses the domain name server receives continuously routing information from “servers” which is equivalent to “endpoints” such as details about “the available capacity for each link, the bandwidth of each link, the processor capacity” what are equivalent to “predetermined event”, see (Kaval: column 3, lines 48-67; column 4, lines 1-9). Base on this information the domain name server calculates the best route or the route with least delay, see (kaval: column 4, lines 65-67; column 5, lines 3-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Kaval’s ideas of distribution data base on the predetermined event such as available capacity for each link, the bandwidth of each link, the processor capacity with Miller’s system in order to provide the best route or the route with least delay, and getting the benefit from the lower delay and higher performance, see (Kaval: column 2, lines 7-10; column 4, lines 65-67).

Regarding to claim 9:

Miller discloses the invention substantially as disclosed in claim 8, but does not explicitly teach wherein determining the sequence comprises determining the sequence base on one or more of the group comprising data communications bandwidth availability between the application server and the endpoint, processing capacity of one or more of the application layer

routers, processing capacity of a gateway receiving messages from the endpoint and the application server, and data communications bandwidth availability between the endpoint and the gateway.

However, Kaval discloses a method of arrangement for load sharing in computer networks, arrangement for distribution of traffic and routing policy, see (Kaval: abstract, lines 1-5; column 4, lines 5-9). Kaval discloses the routing information includes details about the available processor capacity and the bandwidth of each link (Kaval: abstract, lines 1-5; column 4, lines 5-9; column 3, lines 49-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Kaval's ideas of distribution data base on the predetermined event such as available capacity for each link, the bandwidth of each link, the processor capacity with Miller's system in order to provide the best route or the route with least delay, and getting the benefit from the lower delay and higher performance, see (Kaval: column 2, lines 7-10; column 4, lines 65-67).

Regarding to claims 7, which is exemplary of claim 4:

Miller discloses the invention substantially as disclosed in claims 1 and 11, but does not explicitly teach wherein the predetermined event is one or more of the group comprising receipt of a bandwidth availability message, and receipt of a processor capacity availability message.

However, Kaval discloses a method of arrangement for load sharing in computer networks, arrangement for distribution of traffic and routing policy, see (Kaval: abstract, lines 1-5; column 4, lines 5-9). Kaval discloses the routing information includes detail about the available processor capacity and the bandwidth of each link, see (Kaval: column 3, lines 49-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Kaval's ideas of distribution data base on the predetermined event such as expiration of a timer, available bandwidth and processor capacity availability of each link with Miller's system in order to provide the best route or the route with least delay, and getting the benefit from the lower delay and higher performance, see (Kaval: column 2, lines 7-10; column 4, lines 65-67).

Regarding to claim 12:

Miller discloses the invention substantially as disclosed in claim 11, but does not explicitly teach wherein the application server further comprises a bandwidth allocation system transmitting the message.

However, Kaval discloses a method of arrangement for load sharing in computer networks, arrangement for distribution of traffic and routing policy, see (Kaval: abstract, lines 1-5; column 4, lines 5-9). The routing information includes detail about the available processor capacity and the bandwidth of each link, see (Kaval: column 3, lines 49-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Kaval's ideas of distribution data base on the predetermined event such as expiration of a timer, available bandwidth and processor capacity availability of each link with Miller's system in order to provide the best route or the route with least delay, and getting the benefit from the lower delay and higher performance, see (Kaval: column 2, lines 7-10; column 4, lines 65-67).

Claims 13-14, 17 are rejected under 35 U.S.C 103(a) as being un-patentable over Miller in view of Crowle (U.S. 5,857,072)

Regarding to claim 13:

Miller discloses the invention substantially as disclosed in claim 11, but does not explicitly teach wherein the application server further comprises an event based sequencing system transmitting the message

However, Crowle discloses each “network location” which is equivalent to “endpoints” responses an IVE-GOT message providing specifics about the data it currently contains. The “data server” which is equivalent to “application server” then uses the data returned from the network location to determine whether all appreciate locations received the data, and start a new data distribution cycle: column 7, lines 18-31).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Crowle’s ideas of responding an IVE-GOT message providing specifics about the data it currently contains with Miller’s system in order to perform data distribution cycle.

Regarding to claim 14:

Miller discloses the invention substantially as disclosed in claim 11, but does not explicitly teach wherein the first application layer router further comprises a router controller storing the message prior to transmitting the message over the first channel: (Crowle discloses “master server” which is equivalent to “controller” therein stores and distributes the “data” which is equivalent to “message” to sub-servers: column 10, lines 29-42).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Crowle’s ideas of distributing files from master server to end user through “routers” which is equivalent to “first channels” and “bridges” which is equivalent

to “second channel” with Miller’s system in order to provide higher transfer rate, see (Miller: column 3, line 14).

Regarding to claim 17:

Miller discloses the invention substantially as disclosed in claim 11, but does not explicitly teach a gateway receiving response data from the end point generated in response to the message

However, Crowle discloses each “network location” which is equivalent to “endpoints” responses an IVE-GOT message providing specifics about the data it currently contains. The “data server” which is equivalent to “gateway” then uses the data returned from the network location to determine whether all appreciate locations received the data, and starts a new data distribution cycle: column 7, lines 18-31).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Crowle’s ideas of responding an IVE-GOT message providing specifics about the data it currently contains with Miller’s system in order to indicate the status of communication.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to lan dai thi truong whose telephone number is 571-272-7959. The examiner can normally be reached on monday- friday from 8:30am to 5:00 pm.

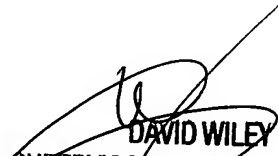
If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Dai Thi Truong
Examiner
Art Unit 2143

Ldt
11/02/2005


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100